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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,003	10/30/2003	Itzhak Bentwich	050992.0300.CPUS10	1002
37808 7590 03/30/2007 ROSETTA-GENOMICS c/o PSWS 700 W. 47TH STREET SUITE 1000 KANSAS CITY, MO 64112			EXAMINER SHIN, DANA H	
			ART UNIT 1635	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/30/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/707,003	Applicant(s) BENTWICH, ITZHAK	
	Examiner Dana Shin	Art Unit 1635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22 is/are allowed.
- 6) ☒ Claim(s) 21 and 23-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10-6-06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Application/Amendment/Claims

This Office action is in response to the communications filed on February 8, 2007.

Currently, claims 21-29 are pending. Applicants have cancelled claims 30-31.

The following rejections are either newly applied or are reiterated and are the only rejections and/or objections presently applied to the instant application.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Arguments and Amendments

Withdrawn Rejections

Any rejections not repeated in this Office action are hereby withdrawn.

New Rejections Necessitated by Amendments

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21, 23-24, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Cronin et al. (US 6,027,880).

Claims 21 and 23 are currently amended to read on an isolated nucleic acid consisting of a sequence at least 71.3% identical to at least 18 consecutive nucleic acid of SEQ ID NO:863. Since claims 24 and 29 depend from an amended claim, claim 21, they are considered amended as well.

Cronin et al. teach isolated nucleic acids comprising SEQ ID NOs:11, 33, 49, and 107 all of which are 18 nucleotides in length. 14 nucleotides of SEQ ID NOs:11, 33, 49, and 107 are identical to SEQ ID NO:863, rendering 77.7% identity, thereby meeting the structural requirements set forth in the claims. They teach that SEQ ID NOs:11, 33, 49, and 107 are used as probes that can detect mutations in the cystic fibrosis transmembrane conductance regulator gene (columns 1-2 and 25).

Claims 21, 23-24, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Vider et al. (WO 99/34016).

The claims are described above.

Vider et al. teach an isolated nucleic acid referred to as A9(+), which is a 21-mer oligonucleotide primer specific for HOX genes that is used for RT-PCR. See page 26. 18 nucleotides of this primer of Vider et al. are identical to SEQ ID NO:863, rendering 85.7% identity, thereby meeting the structural requirements set forth in the claims.

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Claims 21, 23-24, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Lutz. (EP 1013775 A1).

The claims are described above.

Lutz teaches an isolated nucleic acid comprising SEQ ID NO:64, which is a 25-mer oligonucleotide primer that is used for RT-PCR. See page 25. 18 nucleotides of this primer of Vider et al. are identical to SEQ ID NO:863, rendering 85.7% identity, thereby meeting the structural requirements set forth in the claims.

Claims 21, 23-27, and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Freier et al. (US 6,503,756 B1).

The claims are drawn to an isolated nucleic acid consisting of at least 18 consecutive nucleotides of SEQ ID NO:863 with at least 71.5% complementary to a binding site located in an untranslated region of RNA encoded by the target gene.

Freier et al. teach an isolated nucleic acid molecule of SEQ ID NO:131, which is 20 nucleotides in length. 16 nucleotides of SEQ ID NO:131 of Freier et al. are identical to instantly claimed SEQ ID NO:863, thereby rendering 80.0% identity, which falls within the claimed scope of at least 71.3% identity. See columns 47-48. They teach that the oligonucleotide comprises RNA or DNA (column 5). Since the isolated nucleic acid molecule of SEQ ID NO:131 is an antisense compound, it is an inherent property of the molecule to function as a molecular probe because of its hybridization to its target sequence and to modulate its target gene expression. Moreover, since the nucleic acid molecule of Freier et al. meets the structural requirement of

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being at least 71.5% complementary to SEQ ID NO:863, as claimed, it will be complementary to a binding site located in an untranslated region, absent evidence to the contrary.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Freier et al. as applied to claims 21, 23-26, and 29 above, and further in view of Monte et al. (*Journal of Virology*, 1996, 70:2086-2094).

The claim is drawn to a vector comprising an HCMV nucleic acid, wherein the nucleic acid consists of a sequence at least 71.3% identical to SEQ ID NO:863.

Freier et al. teach an isolated nucleic acid molecule of SEQ ID NO:131, which is 20 nucleotides in length and 80.0% complementary to SEQ ID NO:863. Freier et al. do not teach a vector comprising the isolated nucleic acid.

Monte et al. teach a vector comprising an antisense HCMV UL83 gene, which blocks HCMV DNA synthesis and viral production in infected cells (pages 2088-2090). They also teach that antisense technology has been utilized to inhibit HSV replication in cells (page 2093).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the prior art to make a vector comprising SEQ ID NO:131

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of Freier et al. One of ordinary skill in the art would have been motivated to do so with a reasonable expectation of success because it was known to inhibit gene expression in cells by a vector comprising an antisense sequence as taught by Monte et al. Although Freier et al. disclosed SEQ ID NO:131 as an antisense compound targeted to syntaxin-4 interacting protein, any vector comprising SEQ ID NO:131 meets the structural limitations set forth in claim 28. Accordingly, the instantly claimed invention taken as a whole would have been *prima facie* obvious at the time the invention was made.

Conclusion

Claims 21 and 23-29 stand rejected.

SEQ ID NO:3588 *per se* appears free of the prior art searched on the record.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

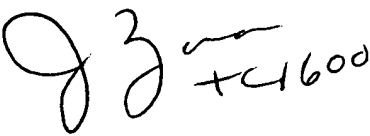
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Shin whose telephone number is 571-272-8008. The examiner can normally be reached on Monday through Friday, from 8am-4:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Douglas Schultz can be reached on 571-272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dana Shin
Examiner
Art Unit 1635


JANE ZARA, PH.D.
PRIMARY EXAMINER